



**COMBINED DECLARATION  
AND POWER OF ATTORNEY**

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(Original, Design, National Stage of PCT, Divisional, Continuation or C-I-P Application)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**PETROLEUM RESERVOIR SIMULATION AND CHARACTERIZATION SYSTEM AND METHOD**

This declaration is of the following type:

- ☒ original
- ☐ design
- ☐ national stage of PCT.
- ☐ divisional
- ☐ continuation
- ☐ continuation-in-part (C-I-P)

the specification of which: *(complete (a), (b), or (c))*

(a) ☐ is attached hereto.

(b) ☒ was filed on October 13, 2000 as Application Serial No. 09/687,813 and was amended on *(if applicable)*.

(c) ☐ was described and claimed in PCT International Application No. filed on and was amended on *(if applicable)*.

**Acknowledgement of Review of Papers and Duty of Candor**

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of the subject matter claimed in this application in accordance with Title 37, Code of Federal Regulations § 1.56.

☐ In compliance with this duty there is attached an information disclosure statement. 37 CFR 1.98.

**Priority Claim**

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or of any PCT International Application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT International Application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application on which priority is claimed

*(complete (d) or (e))*

(d) ☐ no such applications have been filed.

(e) ☒ such applications have been filed as follows:

PRIOR FOREIGN/PCT APPLICATION(S) FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO SAID APPLICATION			
COUNTRY	APPLICATION NO.	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)
			RECEIVED
			SEP 10 2003
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PRIORITY CLAIMED UNDER 35 USC 119			
			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/>
			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/>
			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/>
ALL FOREIGN APPLICATION(S), IF ANY, FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO SAID APPLICATION			
			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/>
			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/>
			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/>

### Claim for Benefit of Prior U.S. Provisional Application(s)

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

Provisional Application Number	Filing Date
60/159,252	October 13, 1999

### Claim for Benefit of Earlier U.S./PCT Application(s) under 35 U.S.C. 120

*(complete this part only if this is a divisional, continuation or C-I-P application)*

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior application(s) in the manner provided by the first paragraph of Title 35, United States Code § 112, I acknowledge the duty to disclose information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
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(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
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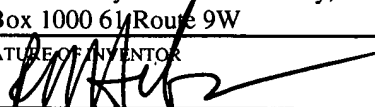

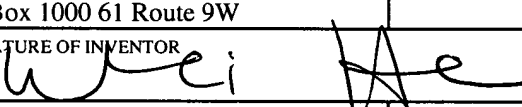
### Power of Attorney

As a named inventor, I hereby appoint Robert Neuner, Reg. No. 24,316; Richard G. Berkley, Reg. No. 25,465; Bradley B. Geist, Reg. No. 27,551; James J. Maune, Reg. No. 26,946; Henry Tang, Reg. No. 29,705; Robert C. Scheinfeld, Reg. No. 31,300; John A. Fogarty, Jr., Reg. No. 22,348; Rochelle K. Seide, Reg. No. 32,300; Gary M. Butter, Reg. No. 33,841; Lisa B. Kole, Reg. No. 35,225; Paul A. Ragusa, Reg. No. 38,587; Neil P. Sirota, Reg. No. 38,306; Francis J. Hone, Reg. No. 18,662; Walter M. Egbert, Reg. No. 37,317; Paul D. Ackerman, Reg. No. 39,891; Gary Abelev, Reg. No. 40,479; Carmella L. Stephens, Reg. No. 41,328; Jeffrey D. Sullivan, Reg. No. 43,170; Eliot D. Williams, Reg. No. 50,822; Kimberly J. McGraw, Reg. No. 50,994; Michael J. McNamara, Reg. No. 52,017 and Peter J. Shen, Reg. No. 52,217 of the firm of BAKER BOTTS L.L.P., with offices at 30 Rockefeller Plaza, New York, New York 10112, as attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith

SEND CORRESPONDENCE TO: BAKER BOTTS L.L.P. 30 ROCKEFELLER PLAZA, NEW YORK, N.Y. 10112 CUSTOMER NUMBER: 21003	DIRECT TELEPHONE CALLS TO: BAKER BOTTS L.L.P. (212) 408-2500
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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FULL NAME OF SOLE OR FIRST INVENTOR	LAST NAME Anderson	FIRST NAME Roger	MIDDLE NAME N.	SEP 10 2003
RESIDENCE & CITIZENSHIP	CITY Palisades	STATE or FOREIGN COUNTRY NY	COUNTRY OF CITIZENSHIP USA OFFICE OF PETITIONS	
POST OFFICE ADDRESS	POST OFFICE ADDRESS 4D Technology 102 Geoscience Lamont-Doherty Earth Observatory, PO Box 1000 61 Route 9W	CITY Palisades	STATE or COUNTRY NY	ZIP CODE 10964-8000
DATE 7/28/03	SIGNATURE OF INVENTOR 			
FULL NAME OF SECOND JOINT INVENTOR, IF ANY	LAST NAME Boulanger	FIRST NAME Albert	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY Palisades	STATE or FOREIGN COUNTRY NY	COUNTRY OF CITIZENSHIP USA	
POST OFFICE ADDRESS	POST OFFICE ADDRESS 4D Technology 102 Geoscience Lamont-Doherty Earth Observatory, PO Box 1000 61 Route 9W	CITY Palisades	STATE or COUNTRY NY	ZIP CODE 10964-8000
DATE 7/10/03	SIGNATURE OF INVENTOR 			
FULL NAME OF THIRD JOINT INVENTOR, IF ANY	LAST NAME He	FIRST NAME Wei	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY Palisades	STATE or FOREIGN COUNTRY NY	COUNTRY OF CITIZENSHIP China	
POST OFFICE ADDRESS	POST OFFICE ADDRESS 4D Technology 102 Geoscience Lamont-Doherty Earth Observatory, PO Box 1000 61 Route 9W	CITY Palisades	STATE or COUNTRY NY	ZIP CODE 10964-8000
DATE 7/28/03	SIGNATURE OF INVENTOR 			
FULL NAME OF FOURTH JOINT INVENTOR, IF ANY	LAST NAME Winston	FIRST NAME Jody	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY Palisades	STATE or FOREIGN COUNTRY NY	COUNTRY OF CITIZENSHIP USA	
POST OFFICE ADDRESS	POST OFFICE ADDRESS 4D Technology 102 Geoscience Lamont-Doherty Earth Observatory, PO Box 1000 61 Route 9W	CITY Palisades	STATE or COUNTRY NY	ZIP CODE 10964-8000
DATE	SIGNATURE OF INVENTOR			
FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	LAST NAME Xu	FIRST NAME Liquing	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY Palisades	STATE or FOREIGN COUNTRY NY	COUNTRY OF CITIZENSHIP China	

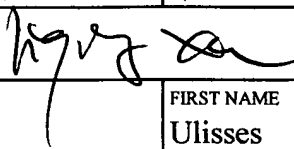
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POST OFFICE ADDRESS	POST OFFICE ADDRESS 4D Technology 102 Geoscience Lamont-Doherty Earth Observatory, PO Box 1000 61 Route 9W	CITY Palisades	STATE or COUNTRY NY	ZIP CODE 10964-8000
DATE 9-30-03	SIGNATURE OF INVENTOR			
FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	LAST NAME Xu	FIRST NAME Liquing	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY Palisades	STATE or FOREIGN COUNTRY NY	COUNTRY OF CITIZENSHIP China	

POST OFFICE ADDRESS	POST OFFICE ADDRESS 4D Technology 102 Geoscience Lamont-Doherty Earth Observatory, PO Box 1000 61 Route 9W	CITY Palisades	STATE or COUNTRY NY	ZIP CODE 10964-8000
DATE 07/15/03	SIGNATURE OF INVENTOR 			
FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	LAST NAME Mello	FIRST NAME Ulisses	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY Yorktown Heights	STATE or FOREIGN COUNTRY NY	COUNTRY OF CITIZENSHIP Brazil	
POST OFFICE ADDRESS	POST OFFICE ADDRESS Thomas J. Watson Research Center, IBM Route 136	CITY Yorktown Heights	STATE or COUNTRY NY	ZIP CODE 10598
DATE	SIGNATURE OF INVENTOR			
FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY	LAST NAME Wiggins	FIRST NAME Wendell	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY Houston	STATE or FOREIGN COUNTRY TX	COUNTRY OF CITIZENSHIP USA	
POST OFFICE ADDRESS	POST OFFICE ADDRESS Western Geophysical P.O. Box 2469	CITY Houston	STATE or COUNTRY TX	ZIP CODE 77252
DATE	SIGNATURE OF INVENTOR			

Check proper box(es) for any added page(s) forming a part of this declaration

- ☐ Signature for ninth and subsequent joint inventors. Number of pages added \_\_\_\_\_.
- ☐ Signature by administrator(trix), executor(trix) or legal representative for deceased or incapacitated inventor.  
Number of pages added \_\_\_\_\_.
- ☐ Signature for inventor who refuses to sign, or cannot be reached, by person authorized under 37 CFR 1.47.  
Number of pages added \_\_\_\_\_.

POST OFFICE ADDRESS	POST OFFICE ADDRESS 4D Technology 102 Geoscience Lamont-Doherty Earth Observatory, PO Box 1000 61 Route 9W	CITY Palisades	STATE or COUNTRY NY	ZIP CODE 10964-8000
DATE	SIGNATURE OF INVENTOR			
FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	LAST NAME Mello	FIRST NAME Ulisses	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY Yorktown Heights	STATE or FOREIGN COUNTRY NY	COUNTRY OF CITIZENSHIP Brazil	
POST OFFICE ADDRESS	POST OFFICE ADDRESS Thomas J. Watson Research Center, IBM Route 136	CITY Yorktown Heights	STATE or COUNTRY NY	ZIP CODE 10598
DATE 8/27/2003	SIGNATURE OF INVENTOR			
FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY	LAST NAME Wiggins	FIRST NAME Wendell	MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY Houston	STATE or FOREIGN COUNTRY TX	COUNTRY OF CITIZENSHIP USA	
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POST OFFICE ADDRESS	POST OFFICE ADDRESS Western Geophysical P.O. Box 2469	CITY Houston	STATE or COUNTRY TX	ZIP CODE 77252
DATE	SIGNATURE OF INVENTOR <i>Wendell Wiggins</i>			

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